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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,957	01/23/2004	Dale J. Heider	P06600US00	7896

22885 7590 12/30/2004

MCKEE, VOORHEES & SEASE, P.L.C.  
801 GRAND AVENUE  
SUITE 3200  
DES MOINES, IA 50309-2721

EXAMINER

GUTMAN, HILARY L

ART UNIT	PAPER NUMBER
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3612

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/763,957

Applicant(s)

HEIDER ET AL.

Examiner

Hilary Gutman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 15-18, 21 and 22 is/are allowed.
- 6) ☐ Claim(s) 8, 10, 11, 19, 23 and 25 is/are rejected.
- 7) ☒ Claim(s) 9, 12-14, 20 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

1. Claim 23 is objected to because of the following informalities: line 10, "a closed position" should apparently be "the closed position" since this term was previously recited on line 8. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 8, 10-11, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Baltz et al.

For claim 8, Baltz et al. (5,404,827) disclose a hopper closure assembly for opening and closing a discharge opening O in a hopper H containing granular material (or lading) L that by gravity has a weight force extending toward the discharge opening O, the hopper closure assembly comprising: a gate frame (generally F) surrounding the discharge opening; a gate 26 moveably mounted in approximately a horizontal direction to the gate frame from a closed position (Figure 3) in covering relation over the discharge opening to an open position (Figure 6C) uncovering at least a portion of the discharge opening for removal of the granular material through the discharge opening; the gate 26 having a leading edge (Figure 6A) that moves across the discharge opening when the gate moves between the open and closed positions; the leading edge having an angled member (not numbered, Figure 3) that angles away from the discharge

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opening and the granular material within the hopper, whereby the weight force of the granular material engages the angled member during movement of the gate from the closed position to the open position and includes a horizontal component force that is in the direction of movement of the gate from the closed to the open position.

With regard to claim 10, the gate has a following edge 27 opposite the leading edge, the leading edge approximately level with the following edge.

With regard to claim 11, the angled member is L-shaped and the gate frame has a receiving edge (generally at 32a) that accepts the L-shaped leading edge.

For claim 19, Baltz et al. inherently disclose a method of opening a hopper closure assembly having a hopper H containing granular material L and a discharge opening O below the granular material whereby the granular material by gravity has a weight force directed toward the discharge opening, the method comprising: moving in approximately a horizontal direction a gate 26 having a leading edge (Figure 6A) from a closed position (Figure 6A) wherein the gate covers the discharge opening to an open position (Figure 6C) wherein the gate opens the discharge opening to permit the granular material to move through the discharge opening; angling an angled portion of the leading edge of the gate away from the discharge opening whereby the weight force of the granular material acting on the angled portion will exert a horizontal component force on the gate in the direction of movement of the gate from the closed to the open position.

4. Claims 23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Floehr.

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For claim 23, Floehr (3,089,435) inherently discloses a method of opening a hopper closure assembly, comprising providing a hopper 2 containing granular material and a discharge opening 6 below the granular material whereby the granular material by gravity has a weight force directed toward the discharge opening; providing a longitudinal sliding gate 9 which parallels a plane defined by the discharge opening; providing a downward angled leading edge (Figure 3) upon the sliding gate 9, the leading edge exposed to the granular material when the gate is in a closed position wherein the gate covers the discharge opening; moving the gate 9 from the closed position to an open position wherein the gate opens the discharge opening to permit the granular material to move through the discharge opening; interacting the granular material with the gate to assist in movement; guiding the leading edge of the gate in a direction away from the discharge opening during movement of the gate from the closed to the open positions.

With regard to claim 25, Floehr further inherently discloses angling an angled portion of the leading edge of the gate away from the discharge opening whereby the weight force of the granular material acting on the angled portion will exert a horizontal component force on the gate in the direction of movement of the gate from the closed to the open position.

***Allowable Subject Matter***

5. Claims 1-7, 15-18, and 21-22 are allowed.
6. Claims 9, 12-14, 20, and 24 are objected to as being dependent upon a rejected base claim, containing a minor informality, or being dependent upon an objected base claim, but

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would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and rewritten to overcome the objections set forth above.

*Response to Arguments*

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hilary Gutman whose telephone number is 703-305-0496.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 703-308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**10. Any response to this final action should be mailed to:**

Box AF

Assistant Commissioner for Patents


Washington, D.C. 20231

**or faxed to:**

(703) 872-9327, (for formal communications; please mark "EXPEDITED  
PROCEDURE")

**or:**

(703) 746-3515, (for informal or draft communications, please clearly label  
"PROPOSED" or "DRAFT").

  
Hilary Gutman  
December 22, 2004